



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,810	06/26/2003	Morito Morishima	P 0304520 H7953US	5462
7590 Pillsbury Winthrop LLP Intellectual Property Group Suite 2800 725 South Figueroa Street Los Angeles, CA 90017-5406			EXAMINER PHAM, VAN T	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 08/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/606,810

Applicant(s)

MORISHIMA, MORITO

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 12, 14 and 16-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 14 and 16-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments filed 04/23/2007 have been considered but they are not persuasive.

Applicant's asserted, "Okumura is based on the premise that the data is recorded under CLV (e.g., like a CD) and the tracks are formed on the disc at equal intervals",. That is, because the pitch between the tracks is constant, the movement distance (the amount of movement) of the pickup in the radial direction is constant during both data reproduction and data recording", is true. But Claims never cited the pitch between the tracks cannot be constant, the movement distance (the amount of movement) of the pickup in the radial direction cannot be constant during both data reproduction and data recording. Also, Applicant asserted, "Maeda is directed to an optical disk apparatus for recording marks on the same conditions from the inner peripheral portion to the out peripheral portion of the optical disk. Maeda discloses that when data is to be recorded in the disc, the track should be constant", which is the same reason as above where applicant's arguing the limitations are not read into the claims.

Moreover, Applicant's argued that Okumura fails to teach or suggest changing "the movement distance set by the feeding section in accordance with the radial position of the optical pickup detected by the detecting section", which can be found in Okumura col. 1:

"a device for accessing an optical disc in and from which data is recorded or reproduced at least at a *constant linear velocity* comprising means for rotating the optical disc at a *constant rotation velocity* a head for accessing the optical disc for recording or reading out the data, ***head moving means for moving the head in the radial direction of the optical disc wherein***, when the optical disc is driven by drive means, the head accesses the optical disc at a constant rotation velocity, and data processing means for changing a clock in accordance with the position of the head in the radial direction of the optical disc and processing data which is recorded in or reproduced from the optical disc in response to this clock, wherein the data which is accessed relatively to the optical disc by the head at a constant rotation velocity is recorded or reproduced substantially at a constant linear velocity."

And col. 5,

Art Unit: 2627

"The read head 13 in FIG. 1 includes also a linear encoder 10 *detecting the amount of displacement of the read head 3 in the radial direction of the disc.*

Col. 7,

"after detecting the current position of the read head 3 (S2), accessing from the host system 15 is awaited (S3). When accessing has been made by the host system 16 and a designated address has been given, *the controller 5 calculates, responsive to the measured write speed information, an object address position and an amount of displacement from the current head position* (S4). When, for example, the write speed is known to be 1.4 m/sec. and the block corresponding to the designated address is a block of 32 minute, 43 second, 37 block, a position of .phi.90 mm is calculated as the position to which the read head should be displaced.

Noted: Applicant's representative has initiated a phone interview on March 05, 2007 about the distance movement, describe below:

"Applicant's representative pointed out the movement distance controlling section changes the movement distance in the feeding section in accordance with a difference of tracks width of the optical pickup detected by the detection section, However, that feature has never been claimed in claims 1, 12 or 14. Therefore, a new amendment will be submitted with the feature above" (see Interview Summary mailed on 03/14/2007).

However, the limitation mention above was not addressed as the agreement.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 12, 14, and 16-25 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al. (US 5,444,687) in view of Maeda et al (US 5,768,245).

Regarding claim 1. Okumura discloses an optical disc recording apparatus comprising:

a rotating section which rotates the optical disc at a substantially constant speed (see Figs. 1, 4, abstract); (noted that Okumura also discloses an optical pickup which applies a laser beam of substantially constant power to an optical disc, see response above).

a feeding section which moves the optical pickup by a movement distance in a radial direction of the optical disc (see Figs. 1, 4, cols. 1-2, col. 4, line 65- col. 5, line 9);

a detecting section which detects a radial position of the optical pickup with respect to the optical disc (see col. 7, lines 18-29); and

a movement distance controlling section which changes the movement distance set by the feeding section in accordance with the radial position of the optical pickup detected by the detecting section (see Figs. 1, 4, cols. 1-2, col. 4, line 65- col. 5, line 9 and see response above).

Okumura disclose an optical pickup in which data is recorded or to be recorded at a constant linear velocity (noted that the Applicant admitted prior art discloses CLV (constant linear velocity) system in which recording is performed while controlling the power of a laser beam emitted from an optical pickup to an optical disc to be constant (see [0006])).

Also, Maeda, see Fig. 1 and col. 7, lines 4-37, discloses an optical pickup, which applies a laser beam of substantially constant power to an optical disc (noted that Maeda does disclose the combination of the optical disk is rotated at a constant rotational speed with a constant recording power of the laser light (see col. 7, lines 17-22)).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an optical pickup, which applies a laser beam of substantially constant power to an optical disc in Okumura as suggested by Maeda, the motivation being in order to have data are recorded on the same conditions from the inner peripheral portion to the outer peripheral portion (see Maeda col. 7, lines 31-33).

Regarding claim 2, the combination of Okumura and Maeda, see Okumura Fig. 1 and abstract, discloses the optical disc recording apparatus according to claim 1, wherein a rotation number of the optical disc rotated by the rotating section is controlled by a rotation controlling section to be substantially constant (see Okumura col. 1).

Regarding claim 3, the combination of Okumura and Maeda, see Maeda col. 7 and see Okumura col. 1, discloses the optical disc recording apparatus according to claim 1, wherein the power of the laser beam is controlled by a laser power controlling section to be substantially constant.

Regarding claim 4, the combination of Okumura and Maeda, see Okumura Figs. 1, 4, discloses the optical disc recording apparatus according to claim 1, wherein the feeding section moves the optical pickup each time when the optical disc is rotated once by the rotating section.

Regarding claim 5, the combination of Okumura and Maeda, see Okumura Figs. 7-9, discloses the optical disc recording apparatus according to claim 1, wherein the movement distance controlling section changes the movement distance set by the feeding section, to be reduced in a stepwise manner as the radial position of the optical pickup is further moved from an inner peripheral side of the optical disc toward an outer peripheral side.

Regarding claims 12 and 14, see rejection above of claim 1.

Regarding claims 16, 22, see rejection above of claim 2.

Regarding claim 17, 23, see rejection above of claim 3.

Regarding claim 18, 24, see rejection above of claim 4.

Regarding claim 19, 25, see rejection above of claim 5.

Regarding claim 28, the combination of Okumura and Maeda, discloses the optical disc of claim 1, wherein the movement distance of the optical pickup is the movement distance of the laser beam in the disk radial direction (inherently, wherein the optical pickup head has a laser source on it, so when the head moves in the radial direction, the laser light source has to move too).

Regarding claims 29-30, see rejection above of claim 28.

Regarding claim 31, the combination of Okumura and Maeda, discloses the optical disc of claim 1, wherein the movement distance is set according to a line width of the optical disc (inherently, wherein the recording area of an optical disc is divided in several area in the radial direction, see Okumura col. 10).

Regarding claims 32-33, see rejection above of claim 31.

4. Claims 6-7, 20-21, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al. (US 5,444,687) and Maeda et al (US 5,768,245) in view of Ohira et al. (US 5,748,607).

Regarding claim 6, the combination of Okumura and Maeda, see Okumura Figs. 7-9, discloses the optical disc recording apparatus according to claim 1, the feed management information including radial positions of the optical pickup and corresponding movement distance for the optical pickup, wherein the movement distance controlling section obtains the

movement distance based on the radial position of the optical pickup that is detected by said detecting section, and a corresponding movement distance in the feed management information (see Figs. 6-12 and [0008]-[0010], [0048]).

Ohira disclose an optical disc recording apparatus including a storage section which stores feed management information for forming an image of a density which is uniform over a substantially whole area of the optical (see Figs. 2 and 5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to a storage section which stores feed management information for forming an image of a density which is uniform over a substantially whole area of the optical in Okumura and Maeda as suggested by Maeda, the motivation being in order to form images.

Regarding claim 7, see rejection above of claim 6 and see Okumura Fig. 1, Maeda Fig. 1, Ohira Figs. 2, 5, for the optical disc recording apparatus forms an image on the optical disc in accordance with image data with using the optical pickup, the rotation section, the feeding section the detecting section and the movement distance controlling section.

Regarding claims 20 and 26, see rejection above of claim 6.

Regarding claims 21 and 27, see rejection above of claim 7.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2627

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Cited References

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to optical disk player having reduced laser output during track changes (Tsukamura et al. US 4,660, 189); Method of printing label on optical disk, optical disk unit (Okumura US 2001/0191517); and Optical disk apparatus (Maeda et al US 5,768,245).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER